

Production of 1-butene

Abstract

- 5 Process for producing a 1-butene-containing C₄-hydrocarbon stream (1-C₄⁺ stream) from a 1-butene- and 2-butene-containing C₄-hydrocarbon stream (1- and 2-C₄⁺ feed stream) whose 1-butene content is lower than that of the 1-C₄⁺ stream, by
- 10 a) feeding the 1- and 2-C₄⁺ feed stream and a 1-butene- and 2-butene-containing C₄-hydrocarbon stream (1- and 2-C₄⁺ recycle stream) whose 1-butene content is lower than that of the 1-C₄⁺ stream and which has been produced by means of step (b) below into a distillation column and taking off the 1-C₄⁺ stream and a 2-butene-containing C₄-hydrocarbon stream (2-C₄⁺ stream) whose 1-butene content is lower than that of the 1- and 2-C₄⁺ feed stream and of the 1- and 2-C₄⁺ recycle stream from the distillation column (step a) and
- 15 b) producing the 1- and 2-C₄⁺ recycle stream from the 2-C₄⁺ stream by bringing the 2-C₄⁺ stream into contact with an isomerization catalyst which catalyzes the conversion of 2-butenes into 1-butene in a reaction zone (step b).